

FIG. 1

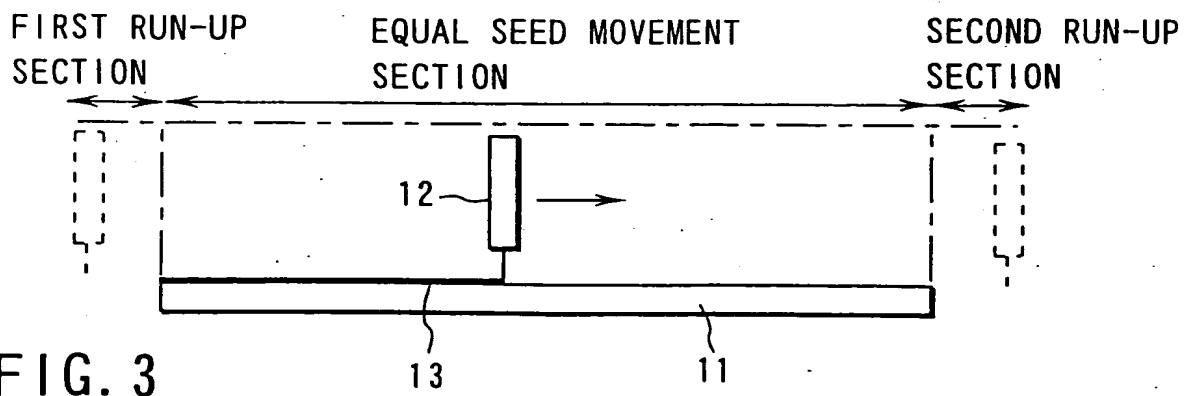
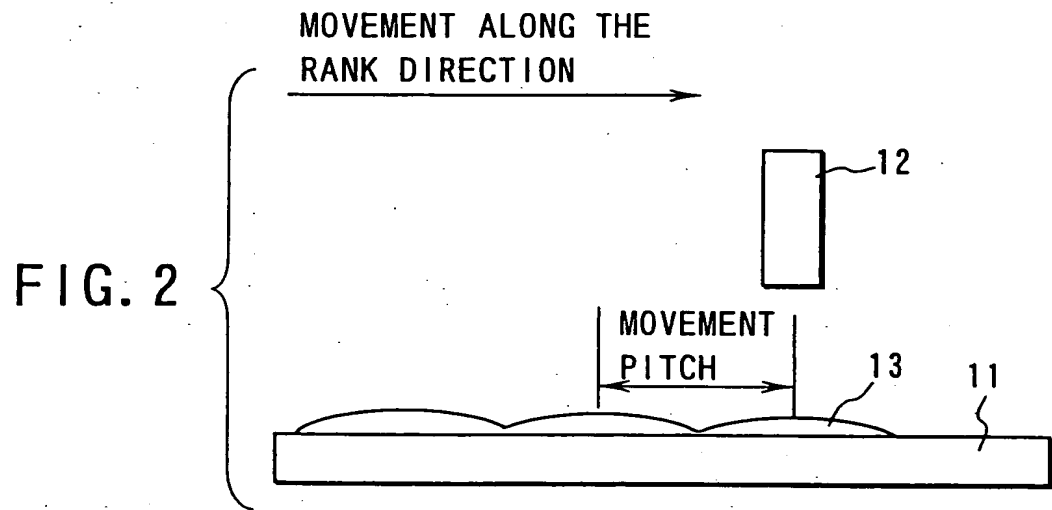


FIG. 3

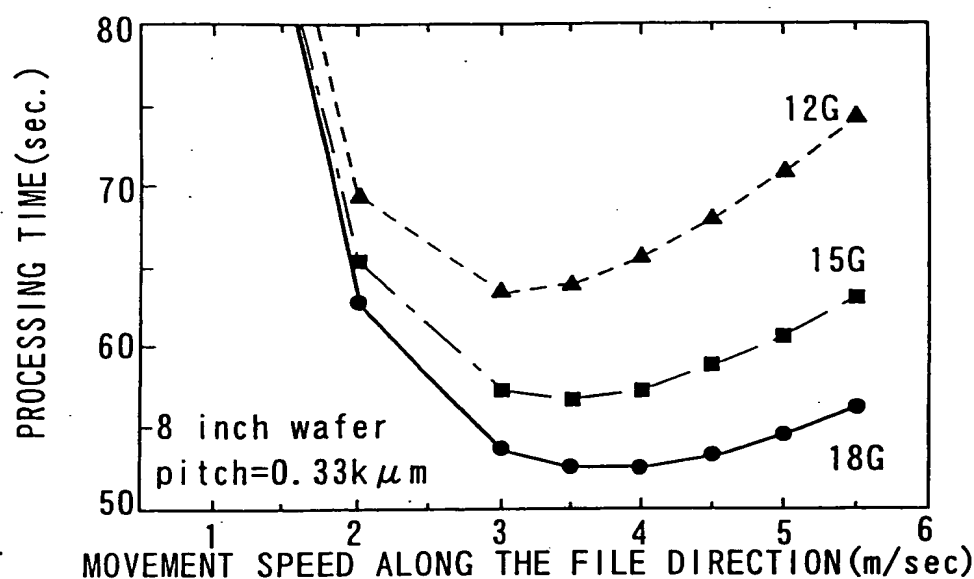


FIG. 4

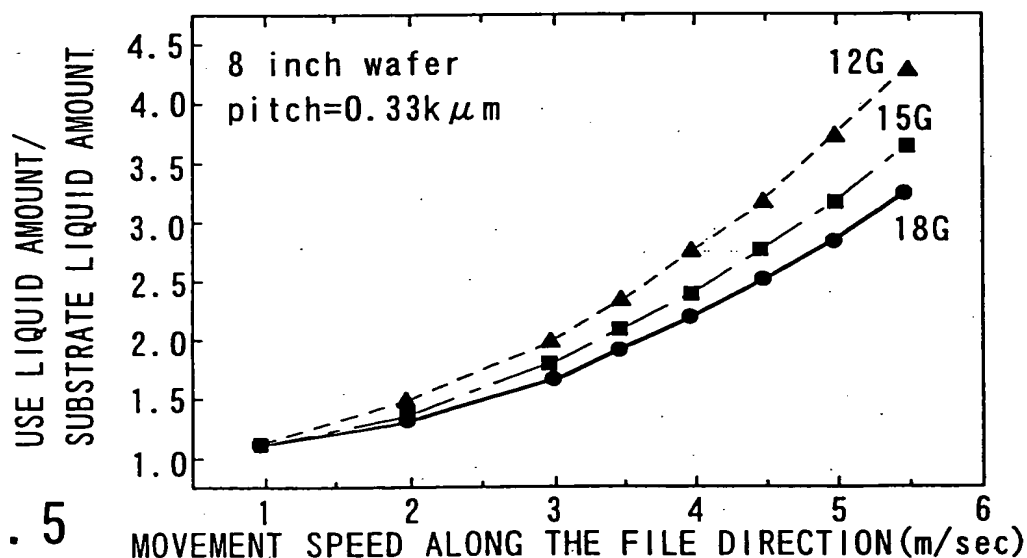


FIG. 5

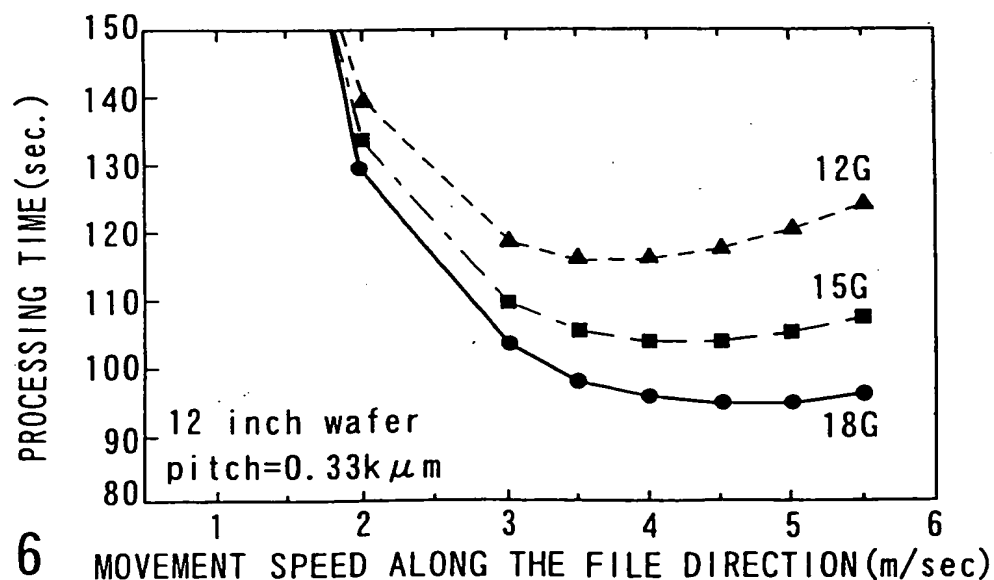


FIG. 6

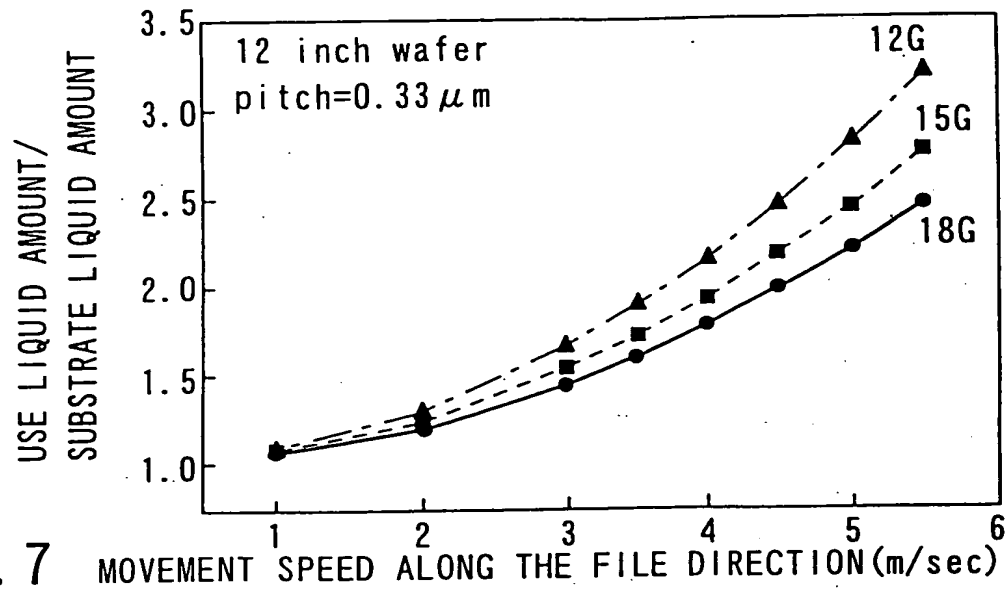


FIG. 7

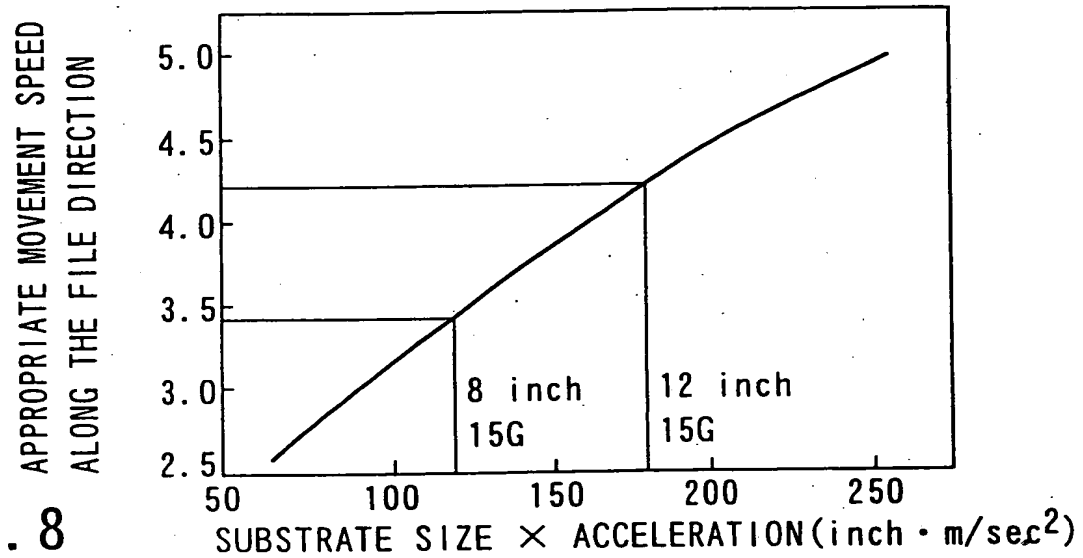


FIG. 8

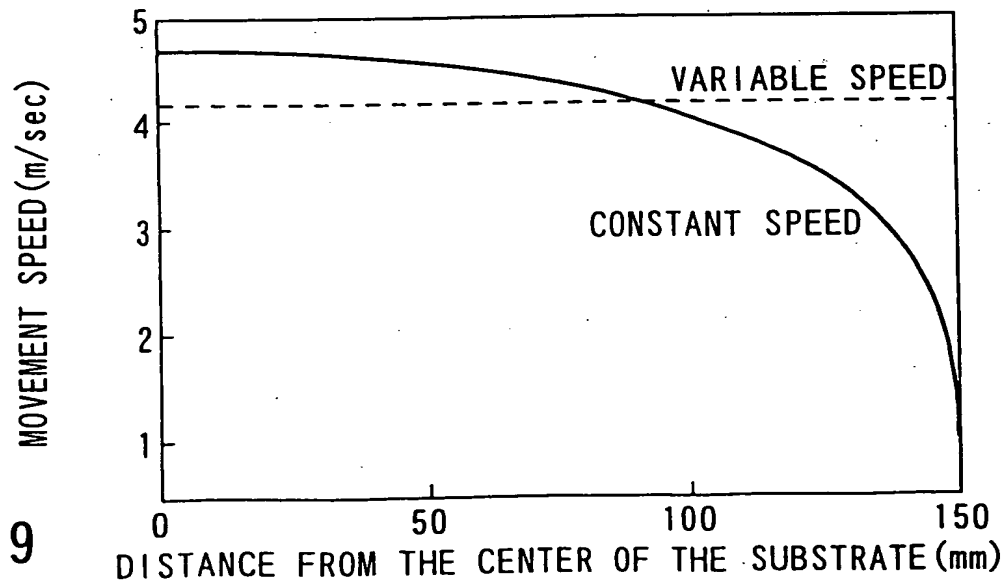
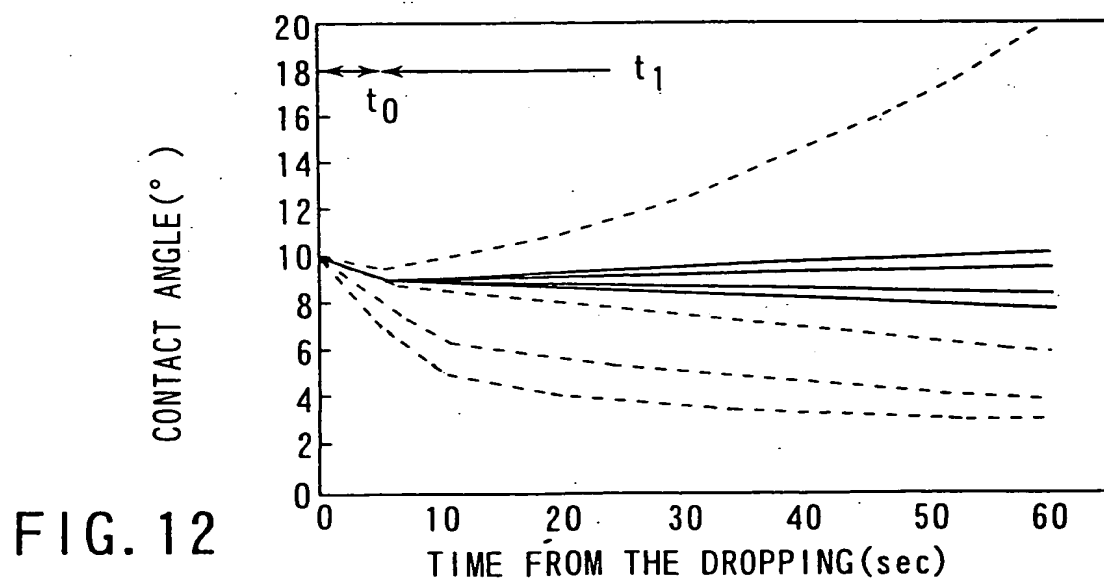
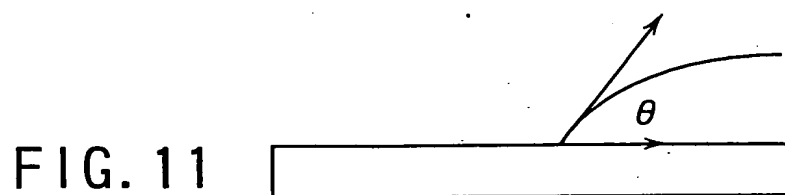
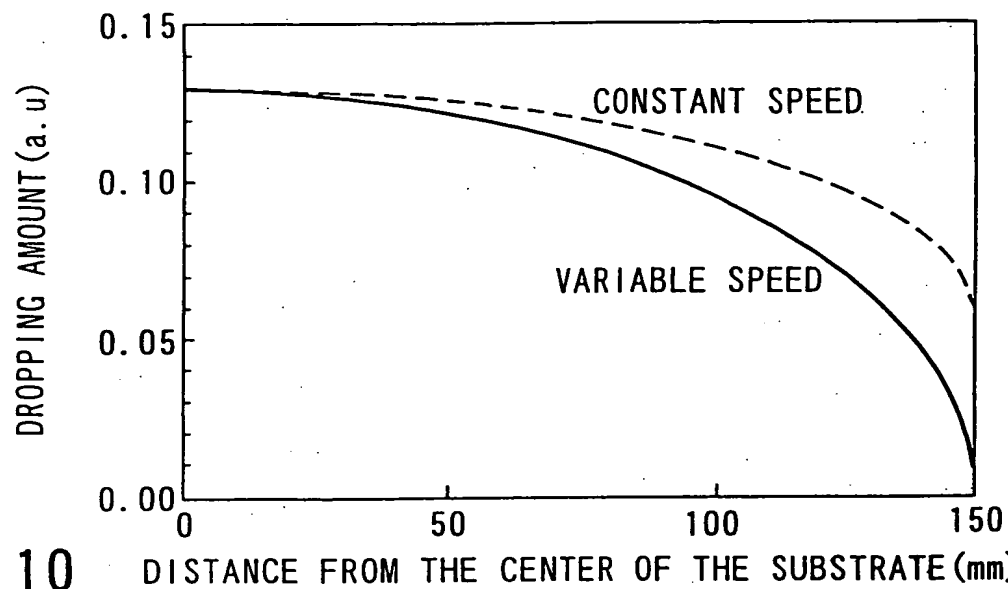


FIG. 9



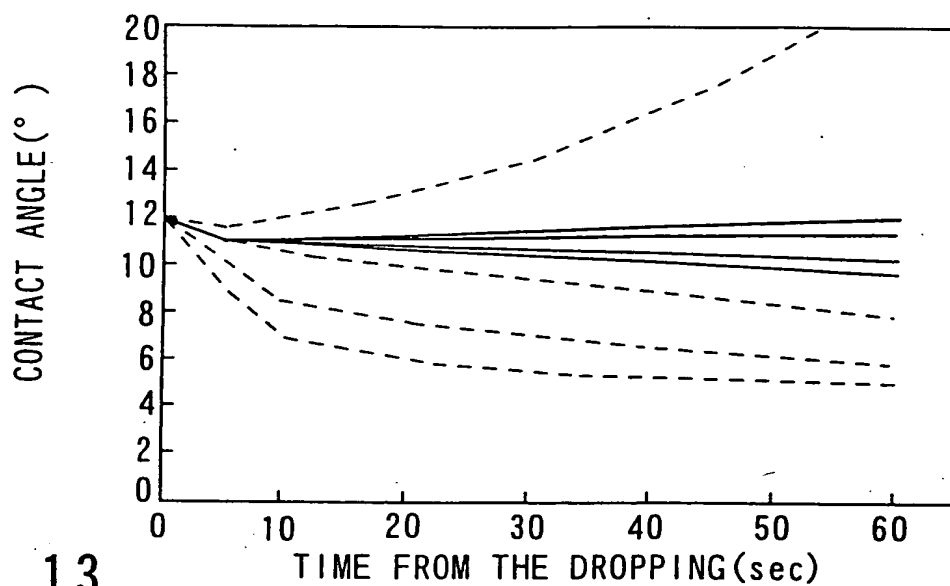


FIG. 13

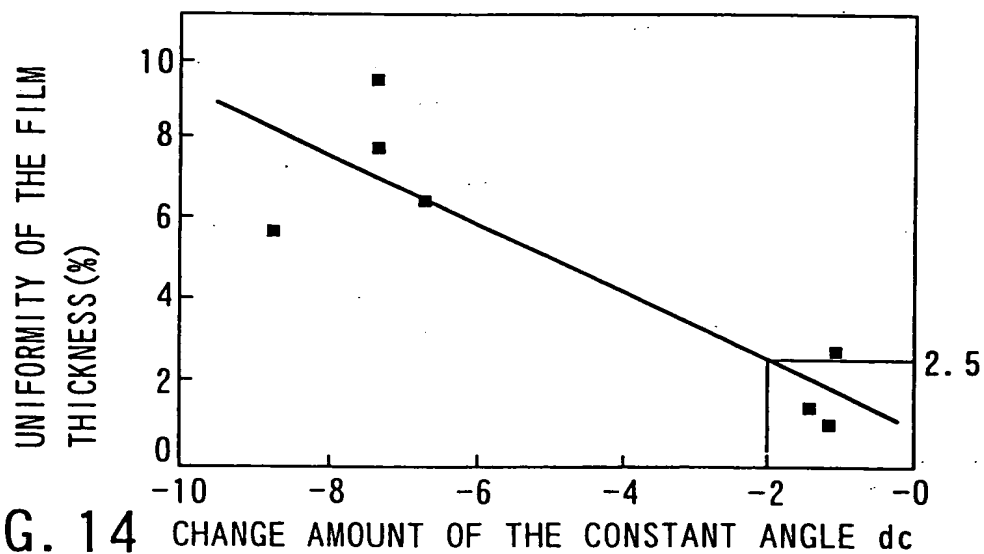


FIG. 14

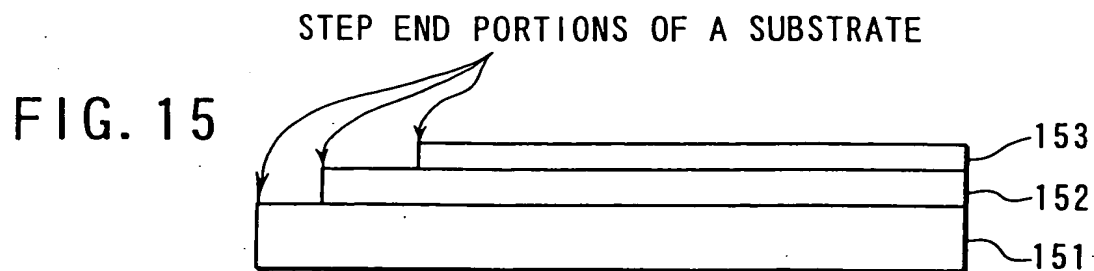
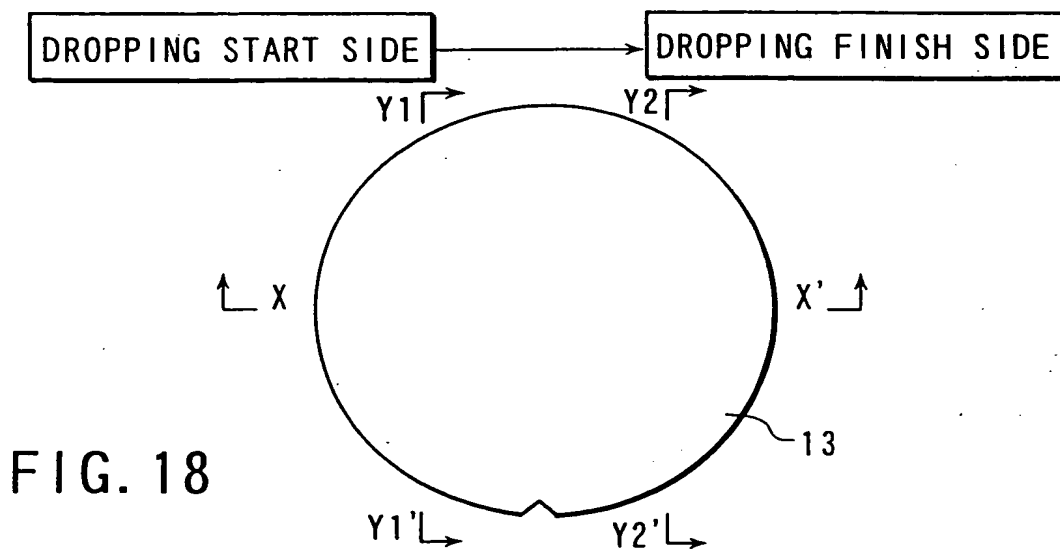
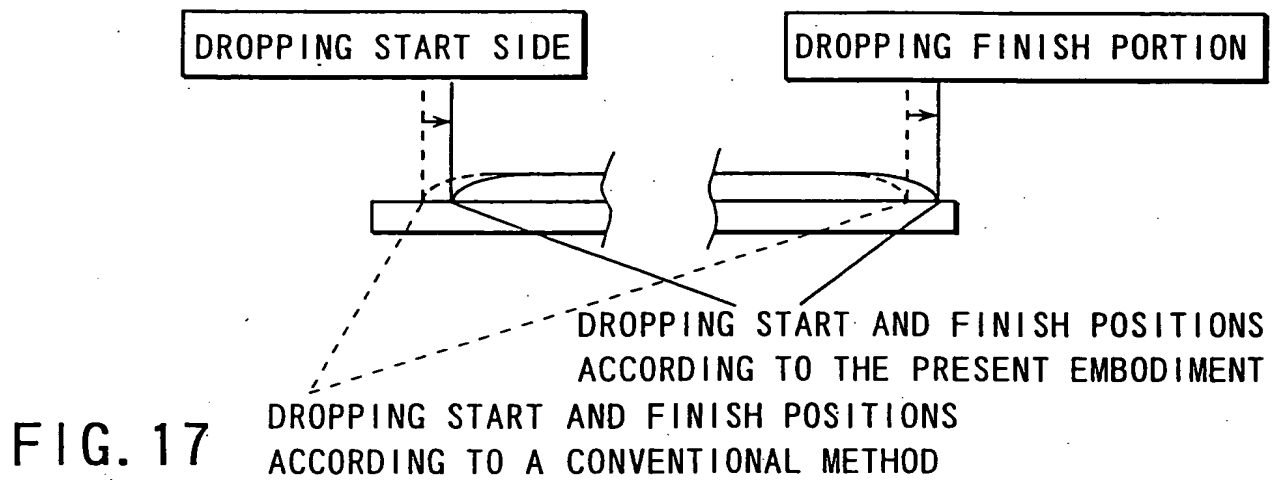
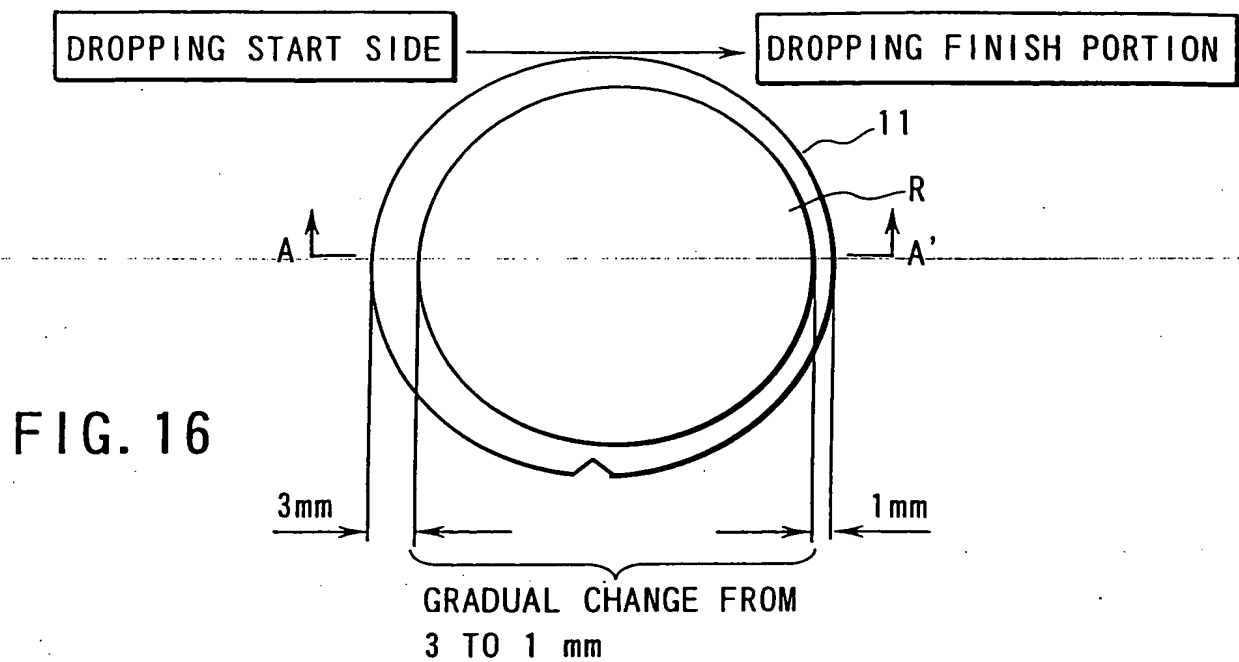


FIG. 15



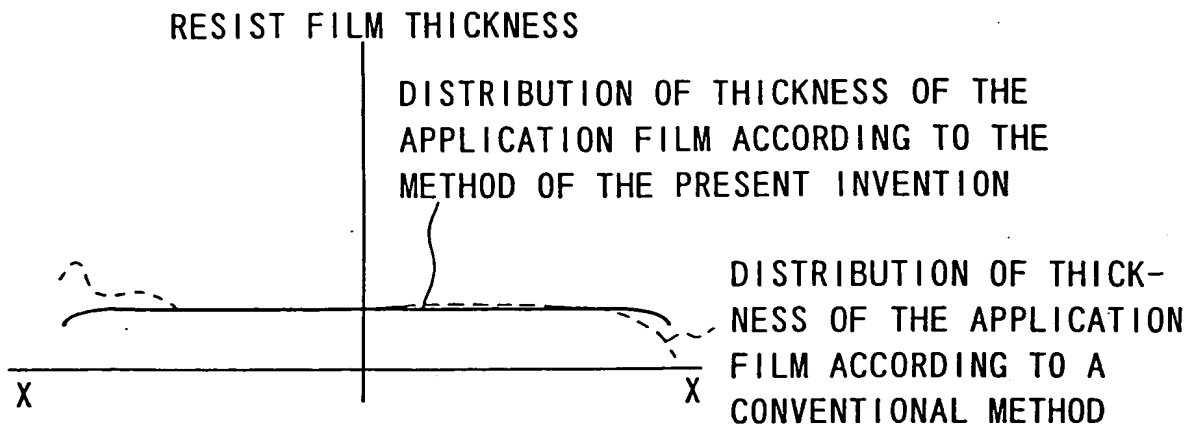


FIG. 19A

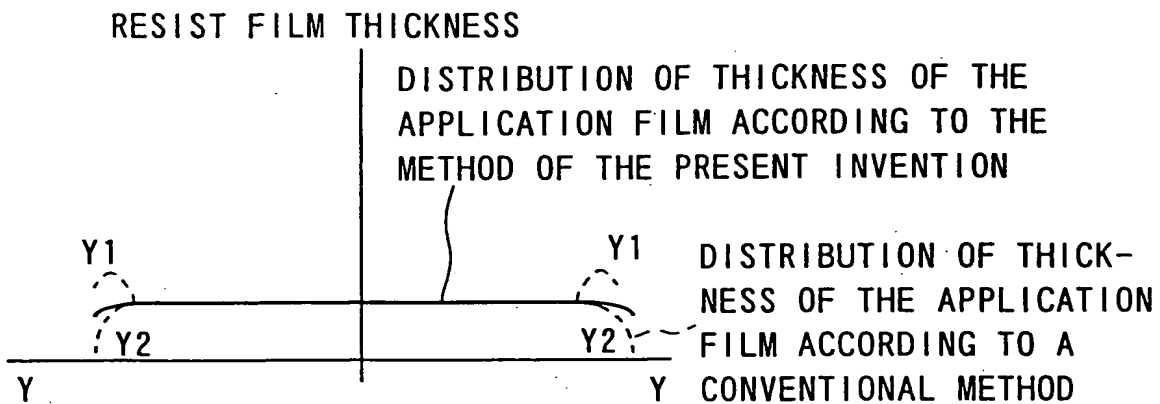
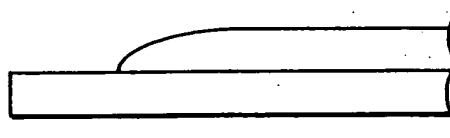


FIG. 19B

FIG. 20A



THE LIQUID IS STOPPED AT THE END OF THE SUBSTRATE, AND THE LIQUID SWELLS

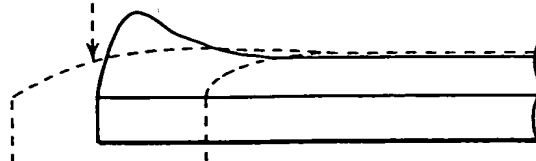


FIG. 20B

FLOWING DISTANCE IN THE CASE THAT THERE IS NO END OF THE SUBSTRATE

FIG. 21A

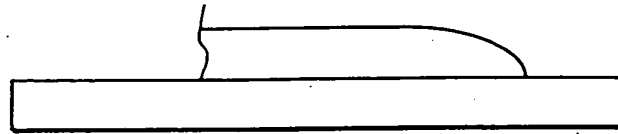
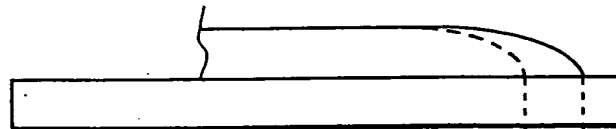
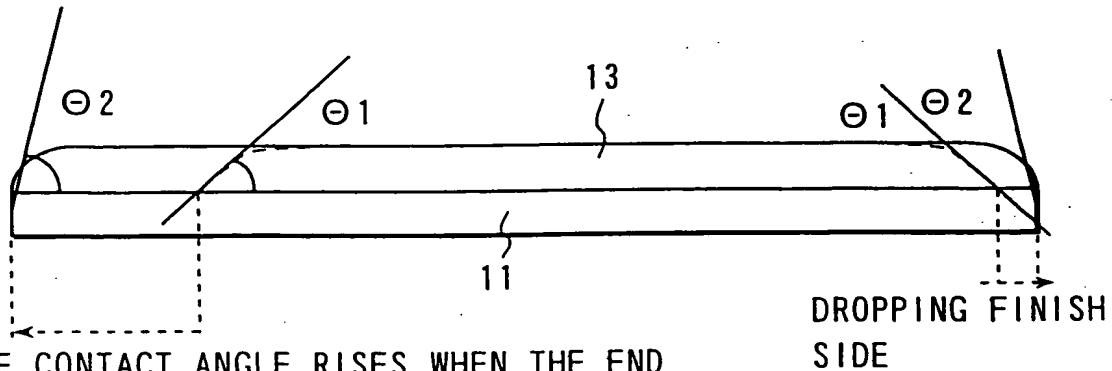


FIG. 21B



FLOWING DISTANCE

DROPPING START SIDE



THE CONTACT ANGLE RISES WHEN THE END
OF THE LIQUID FILM REACHED THE END
OF THE SUBSTRATE

FIG. 22

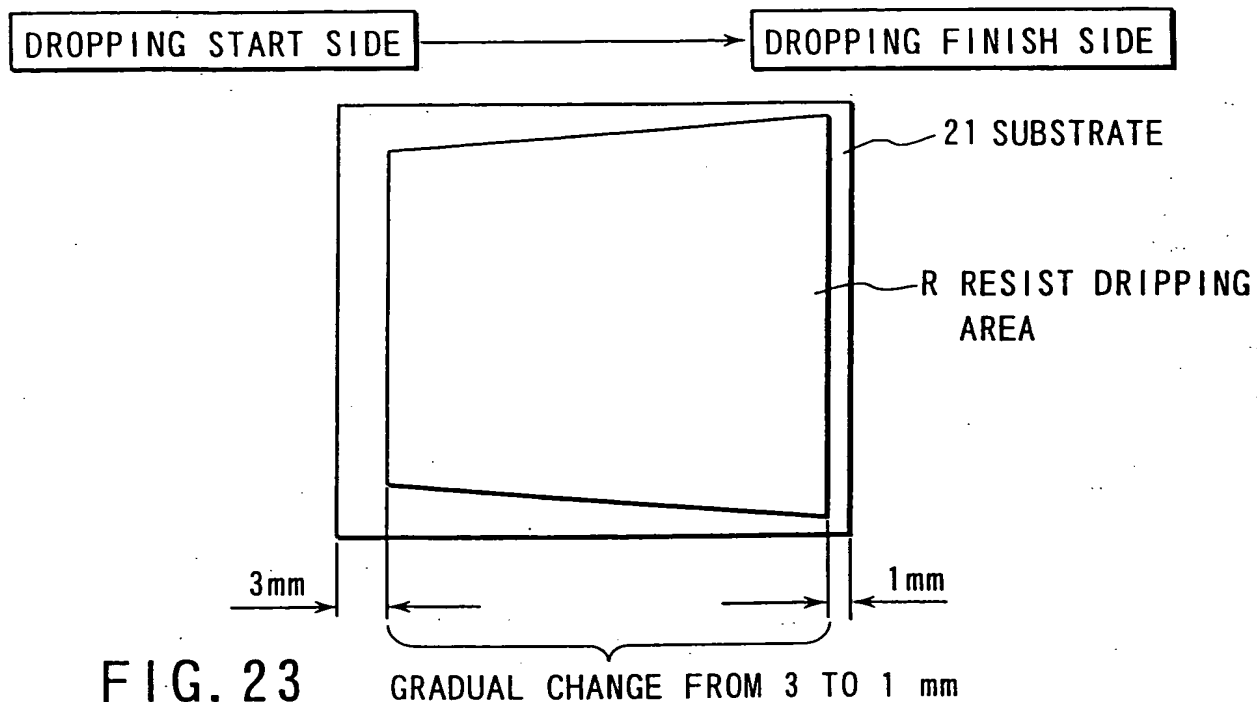


FIG. 23

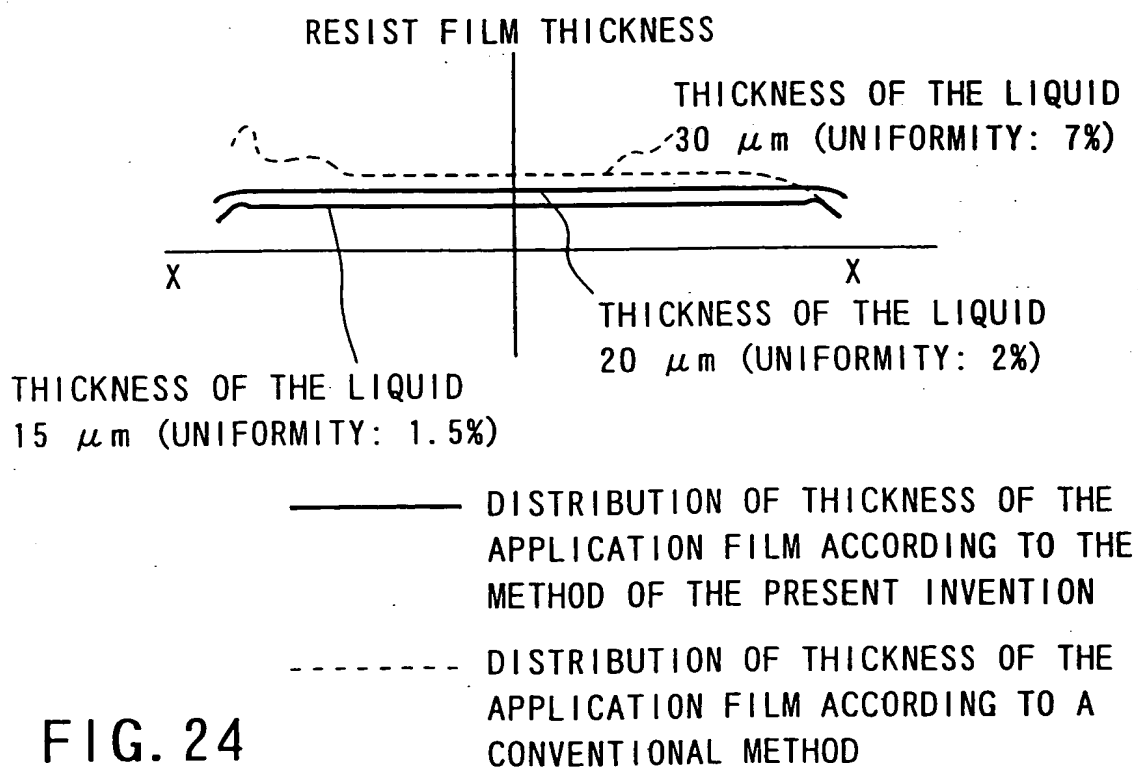
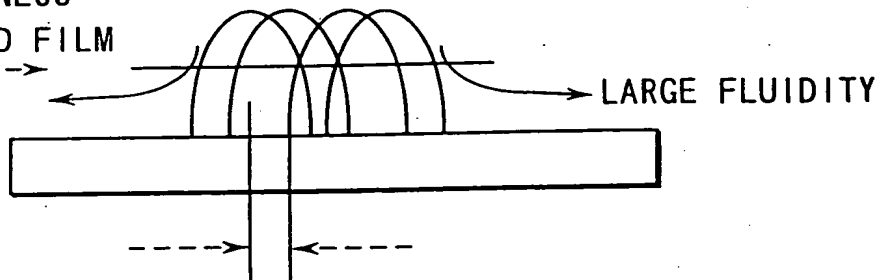
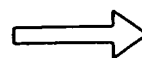


FIG. 24

TARGET THICKNESS
OF THE LIQUID FILM



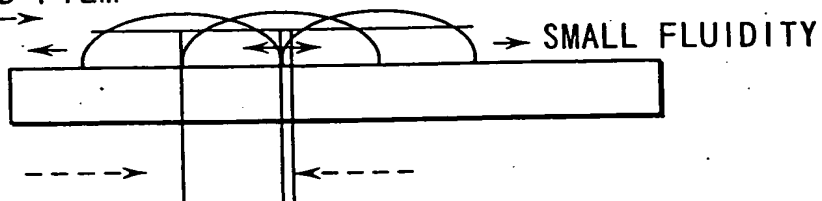
THE PITCH IS MADE SMALL
TO MAKE THE THICKNESS
OF THE LIQUID FILM LARGE



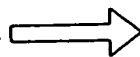
THE LIQUID
FILM FLOWS

FIG. 25A

TARGET THICKNESS
OF THE LIQUID FILM



THE PITCH IS MADE
LARGE TO MAKE THE
THICKNESS OF THE
LIQUID FILM SMALL



THE LIQUID FILM BALANCES
WITH INTERFACIAL TENSION
WITH THE SUBSTRATE SO
THAT THE FILM DOES NOT
MOVE

FIG. 25B